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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/575,118	05/23/2000	Paul Lapstun	NPA012US	9159

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EXAMINER

JORGENSEN, LELAND R

ART UNIT PAPER NUMBER

2675

DATE MAILED: 03/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/575,118

Applicant(s)

LAPSTUN ET AL.

Examiner

Leland R. Jorgensen

Art Unit

2675

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 34 - 96 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 34 - 96 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>2/28/02</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 47 – 50, 54 – 57, 82 – 93, 95, and 96 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cass, USPN 5,692,073, in view of LaMarca et al., USPN 6,279,013 B1.

Claims 47 and 54

As to claim 47, Cass teaches printing 2200 a document [page 1100] containing a list of directory entries [active elements 1101 and 1102]. The directory entries correspond to at least one node of an index of the directory 420. At least one interactive element enables a user to indicate a request for further directory information by interacting with the element using a sensing device which is adapted to transmit request data 2200 to a computer system [computer 100]. Cass teaches printing the further directory 2272 on a document 1110, 1120. Cass, col. 8, lines 30 – 35; col. 10, lines 13 – 17; col. 17, lines 4 – 26; figures 2, 4, 5, 21 and 22.

As to claim 54, Cass teaches a computer system [computer 100] for formatting a document [page 1100] with a list of directory entries [active elements 1101 and 1102] corresponding to at least one node of an index of the directory and at least one user interactive element to enable a user to request further directory information. Cass teaches a printer 104 for printing the document. Cass, col. 8, lines 30 – 35; col. 10, lines 13 – 17; col. 17, lines 4 – 26; figures 2, 3, 4, 5, 21 and 22. Cass teaches a sensing device for interacting with the element and

Art Unit: 2675

transmitting request data to the computer system to facilitate the further information being sent from the computer system to the printer for printing in a further document. Cass, col. 6, lines 20 – 24.

Although Cass does not specifically teach in the preferred embodiment that the directory entries include coded data indicative of the at least one user interactive element, Cass cites prior art that teaches,

As another example, specially coded information, such as a pattern of data glyphs or a bar code, can be included in the form itself to indicate the layout of the blank fields in the form. The computer can be programmed in this case to seek the coded information at a predesignated location within the received image, and to use the coded information together with additional (stored or preprogrammed) information to identify what kind of form has been sent and to determine what is to be done in response to the boxes checked by the user.

Cass, col. 2, lines 61 – 67. See also, Cass, col. 11, lines 22 – 26. Moreover, Cass invites one in the art to incorporate such coded data.

Persons of skill in the art will appreciate that a number of different techniques can be used to retrieve the appropriate reference document from a collection of such documents given a marked document instance. Image-based techniques have great generality, and do not require the indexed documents to include any particular kind of content. Symbolic techniques can be used where and as appropriate.

Cass, col. 11, lines 27 – 33.

Cass teaches that the “...coded information [is] at a predesignated location within the received image....” Cass, col. 2, line 62 – 63. Thus, at least some of the coded data would be substantially coincident with the list of directory entries.

Cass, however, does not teach that the list of directory entries and the coded data is printed substantially simultaneously. Cass also describes the sensing device as a scanner and a computer sensing the entries on the scanned data. Therefore, Cass does not specifically teach

Art Unit: 2675

that the sensing device is "...adapted to (a) sense at least some of the coded data when the user touches the sensing device against the surface in the vicinity of the selected user interactive element,..."

LaMarca teaches a list of directory entries [assorted content items 12, 14, 16] and the coded data [associated tokens 18, 20, 22, 24] that are printed substantially simultaneously.

LaMarca, col. 2, lines 9 – 16; col. 5, lines 4 – 12 and 34 – 40; and figures 1 and 2. LaMarca also teaches a printer 40 for printing a document 10 and 42. LaMarca, figures 1 and 2.

Moreover, LaMarca teaches receiving data from a sensing device. The indicating data is indicative of an identity of the document and an identity of the at least one user interactive element. LaMarca, col. 3, line 59 – col. 4, line 38; col. 5, lines 1 – 5; col. 6, lines 1 – 8; and figures 1 – 4. Like Cass, LaMarca teaches that the device may be a scanner and computer. LaMarca, however, also teaches that a sensing device such as a smart wand 70 that is adapted to (a) sense at least some of the coded data when the user touches the sensing device against the surface in the vicinity of selected user interactive element; and (b) generate the indicating data using at least some of the sensed coded data. LaMarca, col. 2, lines 52 – 63; col. 5, lines 16 – 26; col. 6, lines 24 – 52; and figure 5. LaMarca teaches identifying, using the indicative data, further directory information relating to the selected user interactive element and providing the further directory information to the user. LaMarca, col. 5, lines 4 – 12 and 34 – 40; and figures 1 and 2.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine simultaneous printing of the directory entries and coded data and the handheld sensing device as taught by LaMarca with the method and system for navigating a directory as

Art Unit: 2675

taught by Cass to provide “an interactive media document which allows essentially a continuous updating of subject matter or form for a fine-grain profile of a reader/subscriber, particularly useful for print media documents.” LaMarca, col. 3, lines 55 – 58. Moreover, this advantage is not limited to a newspaper. LaMarca invites such combination with a system for navigating a directory by teaching,

To this point, the invention has been referred to as a newspaper and in terms of content being produced by a mass media publication. The invention has equal merit within an organization where the publication is more of a newsletter than a newspaper. In this context, the delivery would most likely be via mail boxes and the content would be more specific to that organization. As an example, a customized newsletter may contain content such as updates from information services, internal distribution lists, or menus from the cafeteria. In this context even more personalized data might be presented. An employee who had not turned in their W2 tax form might get a reminder at the end of the newsletter and this reminder would continue to appear in future issues until the form is submitted.

LaMarca, col. 5, lines 41 – 54. See also, LaMarca, col. 1, lines 4 – 19; col. 1, line 65 – col. 2, line 6; col. 2, line 64 – col. 3, line 17; and col. 5, lines 27 – 40.

Claims 48 and 55

Cass teaches a further directory information includes a list of directory entries corresponding to at least one node of an index. Cass, col. 8, lines 30 – 35; col. 10, lines 13 – 17; col. 17, lines 4 – 26; figures 2, 4, 5, 21 and 22.

Claims 49 and 56

Cass shows first, pervious, next, and last nodes in the sample directory, e.g. “Myna Bird,” “Toucans” 1111, and “Parrots” 1112. Cass, figure 21.

Claims 50 and 57

Cass teaches that the further directory information includes a list of further nodes in the directory index. Cass, col. 8, lines 30 – 35; col. 10, lines 13 – 17; col. 17, lines 4 – 26; and figures 2, 4, 5, 21 and 22.

Claim 82 – 84, 89 - 91

LaMarca teaches determining the list of directory entries, causing generation of the coded data, determining the layout, and printing the coded data and list of directory entries. LaMarca, col. 4, lines 39 – col. 5, line 12; and figure 2.

Claims 85, 86, 92, 93

Cass teaches a relay device [multifunction device 30] that can receive the indicating data from the sensing device and transfer the data to the computer system. Cass, col. 6, lines 35 – 39; and figure 2.

Claim 87, 88, 95, 96

LaMarca teaches that the layout includes a page description and determining a data portion identity for each coded data portion and printing the coded data. LaMarca, col. 3, line 9 – col. 4, line 40; col. 6, lines 1 – 23; and figure 1 & 3.

3. Claims 51 and 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cass in view of LaMarca et al. as applied to claim 47 or 54 above, and further in view of the Microsoft Computer Dictionary, 4th ed.

Claims 51 and 58

Although Cass shows a parent/child relationship about the information in figure 21, Cass does not specifically state that the user interactive element corresponds to an operation of moving to one of a parent, child or root node of the index.

The Microsoft Computer Dictionary teaches a parent/child relationship in a file directory. Microsoft Computer Dictionary, p. 332.

It would have been obvious to one of ordinary skill in the art at the time of the invention to use the parent/child relationship to organize the index because such organization is an common, effective, and efficient method to organize directory information.

4. Claims 34 – 46, 52, 53, 59 – 81 and 94 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cass in view of LaMarca et al. as applied to claim 47 or 54 above, or over Cass, LaMarca et al., and the Microsoft Computer Dictionary as applied to claim 51 or 58 above and further in view of Dymetman et al, USPN 6,330,976 B1.

Claims 34 and 41

LaMarca teaches that the sensing device [smart wand 70] is hand-held. LaMarca, col. 5, lines 16 – 26; col. 6, lines 24 – 52; and figure 5.

Claim 34 describes a method of enabling a person to navigate a directory similar to the method described in claim 47 above. Claim 41 describes a system for enabling a person to navigate a directory similar to the system described in claim 54 above. Both add, however, that the indicating data is indicative of a position of the sensing device relative to the list of directory entries.

Neither Cass nor LaMarca, however, specifically teach that the indicating data is indicative of a position of the sensing device relative to the list of directory entries.

Dymetman that the indicating data is indicative of a position of the sensing device relative to the list of directory entries. Dymetman et al, col. 9, lines 16 – 22; col. 11, lines 28 – 43; and figures 1 and 2.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine receiving indicating data indicative of a position of the sensing device as taught by Dymetman with the method and system of enabling navigation of a directory as taught by Cass and LaMarca. Dymetman invites such combination by teaching,

The invention addresses problems in obtaining automatic actions through a network. It is often difficult to obtain an appropriate automatic action such as access to multimedia information or other information available through a network. This is especially true where the context includes a physical object such as a hardcopy document, and the action should be appropriate to the object.

Dymetman, col. 2, lines 49 – 54. Dymetman adds,

The invention provides techniques that alleviate these problems. The techniques employ action/medium identifiers encoded in machine-readable markings on marking media such as sheets or stickers of paper or documents. Each action/medium identifier identifies an action. The action/medium identifier can be used to obtain an action identifier that can be provided through a network to an action device to produce the action. The action device provides the identified action automatically in response to the action identifier. The action/medium identifier also identifies the marking medium. Because the action/medium identifier identifies both the marking medium and the appropriate automatic action, the marking medium can be used to obtain the appropriate automatic action in a non-disruptive streamlined manner. The user can obtain the automatic action in a way that does not disturb normal reading activity and does not disturb document appearance.

Dymetman, col. 3, lines 22 - 38. Dymetman concludes,

The invention could be applied in various ways.

Art Unit: 2675

The invention could be applied in a synchronous mode to provide interactive books, magazines, maps, pocket encyclopedias, product catalogues, examination forms, paper address books, and so forth.

The invention could be applied in an asynchronous mode to allow collection of bookmarks while reading a document such as a newspaper or magazine, after which the bookmarks could be used in a batch to retrieve email clippings or print additional information.

Because the pointer behaves like a paper mouse, it can be used to record manual movements in real time, such as drawing or writing motions. Handwritten notes taken during a meeting or during making or playing of a recording can be captured and processed, handwritten faxes can be sent without using a computer, and freeform information requests can be written in an input rectangle inside an advertisement and transmitted to the sponsor for feedback.

Dymetman, col. 35, lines 2 – 19.

Claims 35 – 38 and 42 – 45, 62 - 66, 71 - 75

As to claims 35 – 38, 42 – 45, 62 - 66, and 71 - 75, see discussion of claims 48 – 51, 55 – 58, 82 – 86, and 89 - 93 above.

Claims 39, 52, and 59

Dymetman teaches receiving, in the computer system, movement data regarding movement of the sensing device relative to the document and identifying, in the computer system and from the movement data, further directory information relating to a selected node of the index of the directory. Dymetman, col. 11, lines 28 – 43; col. 35, lines 12 – 19; col. 37, lines 10 – 31 and 36 – 50.

Claims 40, 53, and 60

Dymetman teaches sensing its movement relative to the document using the coded data, generating the movement data and transmitting the movement data to the computer system.

Dymetman, col. 11, lines 28 – 43; col. 35, lines 12 – 19; col. 37, lines 10 – 31 and 36 – 50.

Claim 46

Dymetman teaches that the computer system is adapted to receive movement data regarding movement of the sensing device relative to the document and interpret said movement of the sensing device as it relates to said at least one node of the index, the sensing device, when moved relative to the document, sensing the reference points using at least some of the coded data and generating the data regarding its own movement relative to the document. Dymetman, col. 11, lines 28 – 43; col. 35, lines 12 – 19; col. 37, lines 10 – 31 and 36 – 50.

Claims 61, 81

Dymetman teaches coded data that is invisible to the human eye. Dymetman, col. 11, lines 47 – 62.

It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the invisible coded data as taught by Dymetman with the system and method of navigating a directory as taught by Cass and LaMarca et al. to eliminate visual clutter on the printed page.

Claims 67 – 69 and 77 - 79

LaMarca teaches that the layout includes a page description and a map. LaMarca, col. 3, line 9 – col. 4, line 40; col. 6, lines 1 – 23; and figure 1 & 3.

Claim 70 and 80

LaMarca teaches a page description. LaMarca, col. 3, line 9 – col. 4, line 40; col. 6, lines 1 – 23; and figure 1 & 3.

Claim 76 and 94

Dymetman teaches that the sensing device [pointer 502] includes an image sensor [image capture device 506] and a processor [CPU 608]. Dymetman, col. 16, lines 11 – 50; and figure 9.

Response to Arguments

5. Applicant's arguments filed 2 February 2005 have been fully considered but they are not persuasive.

Applicant adds “at least some of the coded data being substantially coincident with the list of directory entries” to the independent claims. Merriam-Webster’s Collegiate Dictionary, 10th ed., (1999), p. 223, defines coincident as “occupying the same space or time.” Cass teaches that the “...coded information [is] at a predesignated location within the received image....” Cass, col. 2, line 62 – 63. LaMarca shows a list of directory entries [assorted content items 12, 14, 16] and the coded data [associated tokens 18, 20, 22, 24] that are substantially coincident, e.g. 20 and 12, 22 and 14, 16 and 24, . LaMarca, col. 4, lines 5 – 6; and figures 1 & 3. Dymetman teaches that the coded data is substantially coincident with the visible image. Dymetman, col. 12, lines 59 – 67; and figure 4.

Applicant argues that since Dymetman teaches that a supplier may print the coded data that a publisher may print the visible data, that the combination fails to teach that the “list of directory entries and the coded data having been printed onto the surface substantially simultaneously.” See Dymetman, col. 11, lines 47 – 65. But see Dymetman, col. 12, lines 8 – 25. LaMarca, however, teaches a list of directory entries [assorted content items 12, 14, 16] and the coded data [associated tokens 18, 20, 22, 24] that are printed substantially simultaneously. LaMarca, col. 2, lines 9 – 16; col. 5, lines 4 – 12 and 34 – 40; and figures 1 and 2.

Art Unit: 2675

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


Outwater et al., USPN 6,354,501 B1 ; Gundjian et al., USPN 6,106,110 ; Stephany et al., USPN 5,995,193 ; Wright et al., USPN 4,864,618 ; von Hofe, USPN 3,955,502 ; and Hirose, JP 07257059 A; each teach printing visible and invisible information simultaneously.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leland R. Jorgensen whose telephone number is 571-272-7768. The examiner can normally be reached on Monday through Friday, 10:00 am through 6:00 pm..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on 571-272-3638. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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PRIMARY EXAMINER